

PCT09

RAW SEQUENCE LISTING DATE: 01/22/2002 PATENT APPLICATION: US/09/701,623C TIME: 10:33:26

Input Set : A:\Mcll.app



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3 <110> APPLICANT: Wang Ph.D., Chang Yi
 5 <120> TITLE OF INVENTION: PEPTIDE COMPOSITION AS IMMUNOGEN FOR THE TREATMENT OF
         ALLERGY
 8 <130> FILE REFERENCE: 11514153US1
10 <140> CURRENT APPLICATION NUMBER: 09/701,623C
11 <141> CURRENT FILING DATE: 2000-12-01
13 <150> PRIOR APPLICATION NUMBER: PCT/US99/13959
                                                            ENTERED
14 <151> PRIOR FILING DATE: 1999-06-21
16 <150> PRIOR APPLICATION NUMBER: 09/100,287
17 <151> PRIOR FILING DATE: 1998-06-20
19 <160> NUMBER OF SEQ ID NOS: 91
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 325
25 <212> TYPE: PRT
26 <213> ORGANISM: HUMAN
28 <220> FEATURE:
29 <223> OTHER INFORMATION: CH2CH3 of human IgE
31 <300> PUBLICATION INFORMATION:
32 <301> AUTHORs: Dorrington,
        Bennich,
34 <303> JOURNAL: Immunology
35 <304> VOLUME: 41
36 <306> PAGES: 3-25
37 <307> DATE: 1978
39 <400> SEQUENCE: 1
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43 Ser Cys Asp Gly Gly Gly His Phe Pro Pro Thr Ile Gln Leu Leu Cys
46 Leu Val Ser Gly Tyr Thr Pro Gly Thr Ile Asn Ile Thr Trp Leu Glu
                                40
49 Asp Gly Gln Val Met Asp Val Asp Leu Ser Thr Ala Ser Thr Thr Gln
52 Glu Gly Glu Leu Ala Ser Thr Gln Ser Glu Leu Thr Leu Ser Gln Lys
                        70
55 His Trp Leu Ser Asp Arg Thr Tyr Thr Cys Gln Val Thr Tyr Gln Gly
                    85
58 His Thr Phe Glu Asp Ser Thr Lys Lys Cys Ala Asp Ser Asn Pro Arg
               100
                                  105
61 Gly Val Ser Ala Tyr Leu Ser Arg Pro Ser Pro Phe Asp Leu Phe Ile
                              120
64 Arg Lys Ser Pro Thr Ile Thr Cys Leu Val Val Asp Leu Ala Pro Ser
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Input Set : A:\Mcll.app
Output Set: N:\CRF3\01182002\1701623C.raw

65	130					135					140				
	ys Gly	Thr	Val	Asn	Leu	Thr	Trp	Ser	Arq	Ala	Ser	Gly	Lys	Pro	Val
68 1					150		-		_	155		_	_		160
70 A	sn His	Ser	Thr	Arg	Lys	Glu	Glu	Lys	Gln	Arg	Asn	Gly	Thr	Leu	Thr
71				165					170	_				175	
73 V	al Thr	Ser	Thr	Leu	Pro	Val	Gly	Thr	Arg	Asp	Trp	Ile	Glu	Gly	Glu
74			180					185					190		
76 T	hr Tyr	Gln	Cys	Arg	Val	Thr	His	${\tt Pro}$	His	Leu	${\tt Pro}$	Arg	Ala	Leu	Met
77		195					200					205			
79 A	rg Ser	Thr	Thr	Lys	Thr	Ser	Gly	${\tt Pro}$	Arg	Ala	Ala	${\tt Pro}$	Glu	Val	Tyr
80	210					215					220				
	la Phe	Ala	Thr	Pro			Pro	Gly	Ser	Arg	Asp	Lys	Arg	Thr	Leu
83 22					230					235					240
	la Cys	Leu	Ile		Asn	Phe	Met	Pro		Asp	Ile	Ser	Val		\mathtt{Trp}
86				245					250					255	
	eu His	Asn		Val	Gln	Leu	Pro		Ala	Arg	His	Ser		Thr	Gln
89			260					265					270		
	ro Arg	_	Thr	Lys	Gly	Ser		Phe	Phe	Val	Phe		Arg	Leu	Glu
92		275		~ 3	_	~1	280	_	_			285	_	_	- 1
	al Thr	Arg	Ala	GLu	Trp		GLu	Lys	Asp	GLu		ITe	Cys	Arg	Ala
95	290	a 1			a	295	Q	~1	m1	37 - J	300	3		**- 1	G
97 va	al His	GIU	Ата	Ата	310	PIO	ser	GIN	THE	315	GIII	Arg	Ата	vaı	320
	Val As	n Dre	. C1:	, T 17.						212					320
101	Val AS	n Fi(J GI	325											
	<210>	SEO 1	או או		,			•							
	<211>														
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113 <	<301>	AUTHO	ORs:	Pate	1,										
	<303>					eneti	cs								
115 <	<304>	VOLUN	1E: 4	11											
116 <	<306>	PAGES	5: 28	32-28	6										
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	Ala Cy														
	1														
	Sor Cw	a Aer	Pro	val	Glv	' Asp	Thr	His	Thr	Thr	· Ile	Glr.	Let	ı Lev	Cys
124	Jer cy.	o Moi		, ,	· -1	_									
			20)		•		25					30		
	Leu Ile	e Ser	20 Gly)		•	_	Asp		Glu	val		Trp		val
127	Leu Il	e Ser 35	20 f Gly) 7 Tyr	Val	. Pro	40	Asp	Met			45	e Trp	Leu	
127 129 <i>E</i>	Leu Ilo	e Ser 35 y Glr	20 f Gly) 7 Tyr	Val	Pro	40 lle	Asp	Met		Thr	45 Ala	e Trp	Leu	
127 129 <i>I</i> 130	Leu Ilo Asp Gly	e Ser 35 y Glr	20 f Gly 5 n Lys	y Tyr s Ala	Val	Pro Asn 55	40 i Ile	Asp Phe	Met Pro	Tyr	Thr	45 Ala	e Trp	Leu Gly	Thr
127 129 A 130 132 I	Leu Ilo Asp Gly 50 Lys'Glo	e Ser 35 y Glr) u Gly	20 f Gly 5 n Lys	y Tyr s Ala	Val Thr	Pro Asn 55	40 i Ile	Asp Phe	Met Pro	Tyr Glu	Thr 60 Leu	45 Ala	e Trp	Leu Gly	Thr
127 129 # 130 132 I 133	Leu Ilo Asp Gly 50 Lys'Glo	e Ser 35 y Glr) ı Gly	20 G Gly G Lys Asn) 7 Tyr 3 Ala 1 Val	Val Thr Thr 70	Pro Asn 55 Ser	40 n Ile	Asp Phe His	Met Pro Ser	Tyr Glu 75	Thr 60 Leu	45 Ala	Trp Pro	Leu Gly Thr	Thr Gln 80

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Input Set : A:\Mcll.app

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138 Lys Asp Glu Ala Arg Lys Cys Ser Glu Ser Asp Pro Arg Gly Val Thr
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                                    105
141 Ser Tyr Leu Ser Pro Pro Ser Pro Leu Asp Leu Tyr Val His Lys Ala
            115
                                120
144 Pro Lys Ile Thr Cys Leu Val Val Asp Leu Ala Thr Met Glu Gly Met
                            135
                                                 140
147 Asn Leu Thr Trp Tyr Arg Glu Ser Lys Glu Pro Val Asn Pro Gly Pro
                        150
                                             155
148 145
150 Leu Asn Lys Lys Asp His Phe Asn Gly Thr Ile Thr Val Thr Ser Thr
                    165
153 Leu Pro Val Asn Thr Asn Asp Trp Ile Glu Gly Glu Thr Tyr Tyr Cys
154
                                    185
                                                         190
                180
156 Arg Val Thr His Pro His Leu Pro Lys Asp Ile Val Arg Ser Ile Ala
157
            195
                                200
                                                     205
159 Lys Ala Pro Gly Lys Arg Ala Pro Pro Asp Val Tyr Leu Phe Leu Pro
                            215
                                                 220.
162 Pro Glu Glu Glu Gln Gly Thr Lys Asp Arg Val Thr Leu Thr Cys Leu
                        230
                                             235
165 Ile Gln Asn Phe Phe Pro Ala Asp Ile Ser Val Gln Trp Leu Arg Asn
                    245
                                        250
168 Asp Ser Pro Ile Gln Thr Asp Gln Tyr Thr Thr Gly Pro His Lys
                                    265
               260
171 Val Ser Gly Ser Arg Pro Ala Phe Phe Ile Phe Ser Arg Leu Glu Val
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174 Ser Arg Val Asp Trp Glu Gln Lys Asn Lys Phe Thr Cys Gln Val Val
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181 <210> SEQ ID NO: 3
182 <211> LENGTH: 313
183 <212> TYPE: PRT
184 <213> ORGANISM: RAT
186 <220> FEATURE:
187 <223> OTHER INFORMATION: CH2CH3 of rat IgE
189 <300> PUBLICATION INFORMATION:
190 <301> AUTHORs: Dorrington,
         Bennich,
192 <303> JOURNAL: Immunology
193 <304> VOLUME: 41
194 <306> PAGES: 3-25
195 <307> DATE: 1978
197 <300> PUBLICATION INFORMATION:
198 <301> AUTHORs: Patel,
199 <303> JOURNAL: Immunogenetics
200 <304> VOLUME: 41
201 <306> PAGES: 282-286
202 <307> DATE: 1995
204 <300> PUBLICATION INFORMATION:
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Input Set : A:\Mcl1.app

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205 <301> AUTHORs: Steen,
206 <303> JOURNAL: J. Mol. Biol.
207 <304> VOLUME: 177
208 <306> PAGES: 19-32
209 <307> DATE: 1984
211 <300> PUBLICATION INFORMATION:
212 <301> AUTHORs: Ishida,
213 <303> JOURNAL: EMBO J.
214 <304> VOLUME: 1
215 <306> PAGES: 1117-1123
216 <307> DATE: 1982
218 <400> SEQUENCE: 3
219 Ala Arg Pro Val Asn Ile Thr Lys Pro Thr Val Asp Leu Leu His Ser
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222 Ser Cys Asp Pro Asn Ala Phe His Ser Thr Ile Gln Leu Tyr Cys Phe
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                                      25
225 Val Tyr Gly His Ile Gln Asn Asp Val Ser Ile His Trp Leu Met Asp
                                  40
228 Asp Arg Lys Ile Tyr Asp Thr His Ala Gln Asn Val Leu Ile Lys Glu
                              55
231 Glu Gly Lys Leu Ala Ser Thr Tyr Ser Arg Leu Asn Ile Thr Gln Gln
232 65
                          70
                                              75
234 Gln Trp Met Ser Glu Ser Thr Phe Thr Cys Lys Val Thr Ser Gln Gly
                     85
                                          90
237 Glu Asn Tyr Trp Ala His Thr Arg Arg Cys Ser Asp Asp Glu Pro Arg
238
                100
                                     105
240 Gly Val Ile Thr Tyr Leu Ile Pro Pro Ser Pro Leu Asp Leu Tyr Glu
            115
                                 120
243 Asn Gly Thr Pro Lys Leu Thr Cys Leu Val Leu Asp Leu Glu Ser Glu
        130
                             135
\cdot 246 Glu Asn Ile Thr Val Thr Trp Val Arg Glu Arg Lys Lys Ser Ile Gly
                        150
                                             155
249 Ser Ala Ser Gln Arg Ser Thr Lys His His Asn Ala Thr Thr Ser Ile
                    165
                                         170
252 Thr Ser Ile Leu Pro Val Asp Ala Lys Asp Trp Ile Glu Gly Glu Gly
                180
                                     185
255 Tyr Gln Cys Arg Val Asp His Pro His Phe Pro Lys Pro Ile Val Arg
                                 200
258 Ser Ile Thr Lys Ala Leu Gly Leu Arg Ser Ala Pro Glu Val Tyr Val
                             215
                                                 220
261 Phe Leu Pro Pro Glu Glu Glu Lys Asn Lys Arg Thr Leu Thr Cys
264 Leu Ile Gln Asn Phe Phe Pro Glu Asp Ile Ser Val Gln Trp Leu Gln
                    245
                                         250
267 Asp Ser Lys Leu Ile Pro Lys Ser Gln His Ser Thr Thr Thr Pro Leu
                260
                                     265
270 Lys Thr Asn Gly Ser Asn Gln Arg Phe Phe Ile Phe Ser Arg Leu Glu
            275
                                 280
273 Val Thr Lys Ala Leu Trp Thr Gln Thr Lys Gln Phe Thr Cys Arg Val
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Input Set : A:\Mcll.app

Output Set: N:\CRF3\01182002\I701623C.raw

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281 <211> LENGTH: 313
282 <212> TYPE: PRT
283 <213> ORGANISM: MOUSE
285 <220> FEATURE:
286 <223> OTHER INFORMATION: CH2CH3 of mouse IgE
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295 Phe Ile Tyr Gly His Ile Leu Asn Asp Val Ser Val Ser Trp Leu Met
296
298 Asp Asp Arg Glu Ile Thr Asp Thr Leu Ala Gln Thr Val Leu Ile Lys
                              55
301 Glu Glu Gly Lys Leu Ala Ser Thr Cys Ser Lys Leu Asn Ile Thr Glu
302
                                              75
304 Gln Gln Trp Met Ser Glu Ser Thr Phe Thr Cys Arg Val Thr Ser Gln
305
307 Gly Cys Asp Tyr Leu Ala His Thr Arg Arg Cys Pro Asp His Glu Pro
308
                100
                                     105
310 Arg Gly Ala Ile Thr Tyr Leu Ile Pro Pro Ser Pro Leu Asp Leu Tyr
313 Gln Asn Gly Ala Pro Lys Leu Thr Cys Leu Val Val Asp Leu Glu Ser
                            135
316 Glu Lys Asn Val Asn Val Thr Trp Asn Gln Glu Lys Lys Thr Ser Val
317 145
                                             155
319 Ser Ala Ser Gln Trp Tyr Thr Lys His His Asn Asn Ala Thr Thr Ser
320
                    165
                                         170
322 Ile Thr Ser Ile Leu Pro Val Val Ala Lys Asp Trp Ile Glu Gly Tyr
                180
                                     185
325 Gly Tyr Gln Cys Ile Val Asp Arg Pro Asp Phe Pro Lys Pro Ile Val
326
            195
                                 200
328 Arg Ser Ile Thr Lys Thr Pro Gly Gln Arg Ser Ala Pro Glu Val Tyr
        210
                            215
                                                 220
331 Val Phe Pro Pro Pro Glu Glu Glu Ser Glu Asp Lys Arg Thr Leu Thr
                        230
                                             235
334 Cys Leu Ile Gln Asn Phe Phe Pro Glu Asp Ile Ser Val Gln Trp Leu
                    245
                                         250
337 Gly Asp Gly Lys Leu Ile Ser Asn Ser Gln His Ser Thr Thr Thr Pro
338
340 Leu Lys Ser Asn Gly Asn Gln Gly Phe Phe Ile Phe Ser Arg Leu Glu
341
            275
                                280
                                                     285
343 Val Ala Lys Thr Leu Trp Thr Gln Arg Lys Gln Phe Thr Cys Gln Val
                                                 300
346 Ile His Glu Ala Leu Gln Lys Pro Arg
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Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.



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Input Set : A:\Mcll.app

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L:546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:759 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:808 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:872 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:939 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:942 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:1003 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:1006 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:1055 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:1167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
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L:2203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85
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